

CLAIMS

What is claimed is:

1. A lift for raising an associated motorcycle positioned on the lift from a surface of the lift, the motorcycle having a front wheel, a rear wheel, a front portion having a front end structural member disposed above the front wheel and a rear portion having rear end structural members aside the rear wheel, the lift comprising:

a frame defining a wheel-way along a generally longitudinal path on the lift, the wheel-way defining a surface;

a front end lift assembly mounted to a front end of the frame, the front end lift assembly being operably connected to the motorcycle at the front end structural member, the front end lift assembly configured for lifting the front portion of the motorcycle from the surface, the front end lift assembly disposed at about a front end of the wheel-way and including a front end lift drive;

a rear end lift assembly mounted to the frame, the rear end lift assembly operably being connected to the motorcycle at the rear end structural members for lifting the rear portion of the motorcycle from the surface, the rear end lift assembly disposed at about a rear end of the wheel-way and including a rear end lift drive;

wherein the front and rear end lift assemblies are operable independently of one another so that the front portion of the motorcycle is raised from the surface while the rear portion is on the surface, the rear portion of the motorcycle is raised from the surface while the front portion is on the surface, and either of the front and rear portions of the motorcycle is raised from the surface independently of the other and when the other of the front and rear portions of the motorcycle is raised from the surface.

2. The lift in accordance with claim 1 wherein the front end lift assembly includes a front end drive bar operably connected to the frame, the frame providing a track for the drive bar, the front end lift assembly including a support carriage having symmetrical legs defining free ends and a transverse portion between the legs, the legs being connected to the drive bar, the front end lift assembly including a lift arm mounted to the support carriage for connecting to the motorcycle, the carriage enveloping the motorcycle when the motorcycle is on the wheel-way.

3. The lift in accordance with claim 2 wherein the front end lift assembly includes first and second opposed pivot arms each extending from the frame to one of the support carriage legs, the pivot arms being a linkage between the support carriage and the frame.

4. The lift in accordance with claim 2 wherein the lift arm includes a lift pin extending from about an end thereof, the lift pin configured for insertion into motorcycle front end structural member.

5. The lift in accordance with claim 1 including a front wheel locking assembly.

6. The lift in accordance with claim 5 wherein the front wheel locking assembly includes a pivoting saddle mounted to the frame along the wheel-way, the saddle having concave shape and including an entrance portion.

7. The lift in accordance with claim 6 wherein the entrance portion lies along the wheel-way for receiving the front wheel of the motorcycle and pivoting between an entry position wherein the entrance portion lies on the surface and a locking position wherein the entrance portion is raised from the surface when the front wheel passes over and beyond the pivot.

8. The lift in accordance with claim 7 wherein the pivoting saddle includes a pair of angled arms extending outwardly from a top portion thereof.

9. The lift in accordance with claim 5 wherein the front wheel locking assembly includes a wheel stop for engaging the front wheel when the motorcycle is moved onto the lift.

10. The lift in accordance with claim 9 wherein the front wheel stop includes an upwardly extending surface for engaging the front wheel.

11. The lift in accordance with claim 10 wherein the upwardly extending surface has a structural channel configuration having a transverse bend therein.

12. The lift in accordance with claim 11 including an angled V-flange extending from an upper end of the wheel stop.

13. The lift in accordance with claim 1 wherein the rear end lift assembly includes a rear end drive bar operably connected to the frame, the frame providing a track for the drive bar, the rear end lift assembly including a pair of support links pivotally connected to the rear end drive bar, the support links configured for connecting to the motorcycle rear end structural members for lifting the rear portion of the motorcycle from the surface.

14. The lift in accordance with claim 13 including a mounting clip mounted one of the support links.

15. The lift in accordance with claim 1 wherein at least one of the front end lift drive and the rear end lift drive is an electric motor.

16. The lift in accordance with claim 15 wherein both the front end lift drive and the rear end lift drive are electric motors.

17. The lift in accordance with claim 2 wherein the front end drive bar is operably connected to the front end lift drive by a screw drive.

18. The lift in accordance with claim 13 wherein the rear end drive bar is operably connected to the rear end lift drive by a screw drive.

19. A lift for raising an associated motorcycle positioned on the lift from a surface of the lift, the motorcycle having a front wheel, a rear wheel, a front portion having a front end structural member disposed above the front wheel and a rear portion having rear end structural members aside the rear wheel, the lift comprising:

a frame defining a wheel-way along a generally longitudinal path on the lift, the wheel-way defining a surface;

a front end lift assembly mounted to a front end of the frame, the front end lift assembly being operably connected to the motorcycle at the front end structural member, the front end lift assembly including a front end drive bar operably connected to the frame, the frame providing a bearing surface for the drive bar, the front end lift assembly including a support carriage pivotally connected to and extending between the opposing ends of the drive bar and including a transverse portion, the front end lift assembly including a lift arm mounted to the support carriage for connecting to the motorcycle, the carriage enveloping the motorcycle when the motorcycle is on the wheel-way, the front end lift assembly configured for lifting the front portion of the motorcycle from the surface, the front end lift assembly disposed at about a front end of the wheel-way and including a front end lift drive, the front end lift drive being operably connected to the front end drive bar; and

a rear end lift assembly mounted to the frame, the rear end lift assembly operably being connected to the motorcycle at the rear end structural members for lifting the rear portion of the motorcycle from the surface, the rear end lift assembly including a rear end drive bar operably connected to the frame, the rear end lift assembly including a pair of support links pivotally connected to the rear end drive bar, the support links configured for connecting to the motorcycle rear end structural members for lifting the rear portion of the motorcycle from the surface, the rear end lift assembly disposed at about a rear end of the wheel-way and including a rear end lift drive,

wherein the front and rear end lift assemblies are operable independently of one another to raise either or both the front and rear portions from the surface when the other of the front and rear portions of the motorcycle is raised from the surface.

20. The lift in accordance with claim 19 wherein the front end lift assembly and the rear end lift assembly are pivotally connected to the frame and are pivotal downwardly onto the frame to fold flat thereon.

21. The lift in accordance with claim 20 including casters mounted to the frame.

22. A motorcycle stand for securing a motorcycle in an upright orientation, the motorcycle having a front wheel, the device comprising:

a frame defining a wheel-way along a generally longitudinal path on the frame, the wheel-way defining a surface; and

a front wheel locking assembly, the front wheel locking assembly including a pivoting saddle mounted to the frame along the wheel-way, the saddle having a concave shape and including an entrance portion lying along the wheel-way for receiving the front wheel of the motorcycle and pivoting between an entry position wherein the entrance portion lies on the surface and a locking position wherein the entrance portion is raised from the surface when the front wheel passes over and beyond the pivot, the front wheel locking assembly further including a wheel stop for engaging the front wheel when the motorcycle is moved onto the lift and when the front wheel is positioned in the pivoting saddle.

23. The motorcycle stand in accordance with claim 22 wherein the pivoting saddle includes a pair of angled arms extending outwardly from a top portion thereof.

24. The motorcycle stand in accordance with claim 22 wherein the front wheel stop includes an upwardly extending surface for engaging the front wheel.

25. The motorcycle stand in accordance with claim 24 wherein the upwardly extending surface has a structural channel configuration having a transverse bend therein.

26. The motorcycle stand in accordance with claim 22 including an angled V-flange extending from an upper end of the wheel stop.

2025 RELEASE UNDER E.O. 14176